강우진 (Ujin Jonathan Kang)

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Education

Yonsei University

May 2023 - May

BS in Computer Science

2028(expected)

Coursework: Bioinformatics, Data Structures & Algorithms, Discrete Mathematics, Logic Circuit Design,
Computer System

Research Interests

- Natural language processing
- $\circ\,$ Large Language Models
- ∘ IoT & Robotics
- Neuroimaging

Experience

Dencomm(주식회사 덴컴)

Gangnam, Seoul

AI Lab Team Intern

Summer of 2024

- Researched and fine-tuned large language models (LLMs) for bilingual medical dialogue summarization.
- Used PyTorch Lightning, Ray Trainer, and DeepSpeed to optimize PEFT-LoRA fine-tuning efficiency.
- Developed a Streamlit app and a ReAct agent-based dental chatbot (DentaReACT) using Langchain and RAG.

Makerspace i7 (Yonsei University)

Songdo, Incheon

Part-Time Worker

Sept. 2023 - Dec. 2023

- Operated 3D printers, managing filament changes, cleaning, and troubleshooting.
- o Proficient in handling laser cutters and UV printers.
- Front desk duties included handling calls, inquiries, and assisting students with 3D print pickups.

Leadership Experience

YCC (Yonsei Computer Club) Rookies

Jul. 2023 - Dec. 2023

Social Committee Member(친목부원)

- o Organized orientation and social events to foster student connections.
- o Formed inclusive student groups for the semester based on preferences.
- Led study groups, preparing materials and motivating peers.

School Simplified

2021 - 2022

Senior Tutor for Languages Team

- o Conducted personalized one-on-one online tutoring sessions for Spanish, AP Spanish, and Algebra 1
- Mentored and coached newly hired tutors, providing guidance and support to enhance their tutoring skills and effectiveness.
- Developed interview questions and conducted interviews for tutor applicants.

Projects

LLM-Trainer

• Fine-tuned large language models (LLMs) on a bilingual Korean-English medical dialogue dataset for clinical note generation. Used PEFT with LoRa to optimize summarization accuracy and computational efficiency.

QA Dental Chatbot

 Developed a dental chatbot using ReAct agent and RAG, integrating tools like BM25 and MMR retrievers for QA from a dental forum. Designed for 24/7 patient support on websites.

Volunteer Activities

Bethlehem Church 2018 – 2019

Translator

• Translated Korean, English, and Spanish on mission trips in the Medical/Pharmacy Department.

Global Care 2020 – 2022

Volunteer

 \circ Helped pack and hand out provision boxes (+300) and biosecurity toolkits (2000 masks & 12 gallons of alcohol) to areas affected by the ETA and IOTA hurricanes in Honduras.

TES (Trabajo Educativo Social) (Great Commission Academy)

2021 - 2022

Volunteer

• Funded money for classroom chair desks, medical kits, and school supplies for a school in the vicinity that was affected by the ETA and IOTA hurricanes of Honduras

Awards and Acknowledgements

Tutor of the Month 2022

• Recognized as "Tutor of the Month" for demonstrating exceptional commitment and reliability in delivering high-quality tutoring services for AP Spanish in School Simplified.

Technical Skills

Programming: C++, Python

Tools & Libraries: ChromaDB, Langchain, or json ML Frameworks: PyTorch, TensorFlow, Deepspeed

Maker Tools & Technologies: Operation and maintenance of 3D Printers and Laser Cutters

Languages

Korean: Native, First LanguageEnglish: Fluent (TOEIC 960/990)Spanish: Native, First Language